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# Additive AB-V1

## Additive for static rinses to prevent brown discolouration

The **Additive AB-V1** is a possible process step that may prevent the discolouration of EN layers after plating. The ingredients contain an antioxidant and a pH regulator.

### Make up of the static rinse

Circulation or tap water (fresh)	97 Vol.-%
<b>Additive AB-V1 Part 1</b>	2 Vol.-%
<b>Additive AB-V1 Part 2</b>	1 Vol.-%

The static rinse tank is filled with water to approx. 90 % of the intended end volume. While stirring add the required amounts of **Additive AB-V1 Part 1** and **Additive AB-V1 Part 2** and top up to the end volume. The pH value should now be between 11 to 12.

### Maintenance

If the pH value is lower than 10 a discolouration may happen, depending on dipping time and temperature. As soon as the pH value drops below 10.5, the original pH range is adjusted again according to the application by addition of the two additives **Additive AB-V1 Part 1** and **Additive AB-V1 Part 2**.

Application	<b>Additive AB-V1 Part 1</b>		<b>Additive AB-V1 Part 2</b>
Rack	<b>1</b>	:	<b>1</b>
Barrel	<b>1 to 2</b>	:	<b>1</b>

An attack of the nickel layer has never been observed by the process step **Additive AB-V1**, even with dipping times up to 30 minutes and temperatures around 40 °C.

### Waste water treatment

All concentrates, rinse waters and waste solution must be treated and discharged in accordance with local effluent control regulations.

### Possible hazards and safety precautions

These details can be found in the material safety data sheets.

All DNC – process chemicals should be stored between 10 and 25 °C.

If excessive cooling should cause partial crystallisation within the solution, it is possible to warm it up to > 20 °C (stirring is recommended) in order to resolve the precipitations.

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RIAG Oberflächentechnik AG  
Murgstrasse 19a  
CH- 9545 Wängi  
Tel. + 41 (0) 52 / 369 70 70  
Fax + 41 (0) 52 / 369 70 79  
[www.riag.ch](http://www.riag.ch)  
[info@riag.ch](mailto:info@riag.ch)